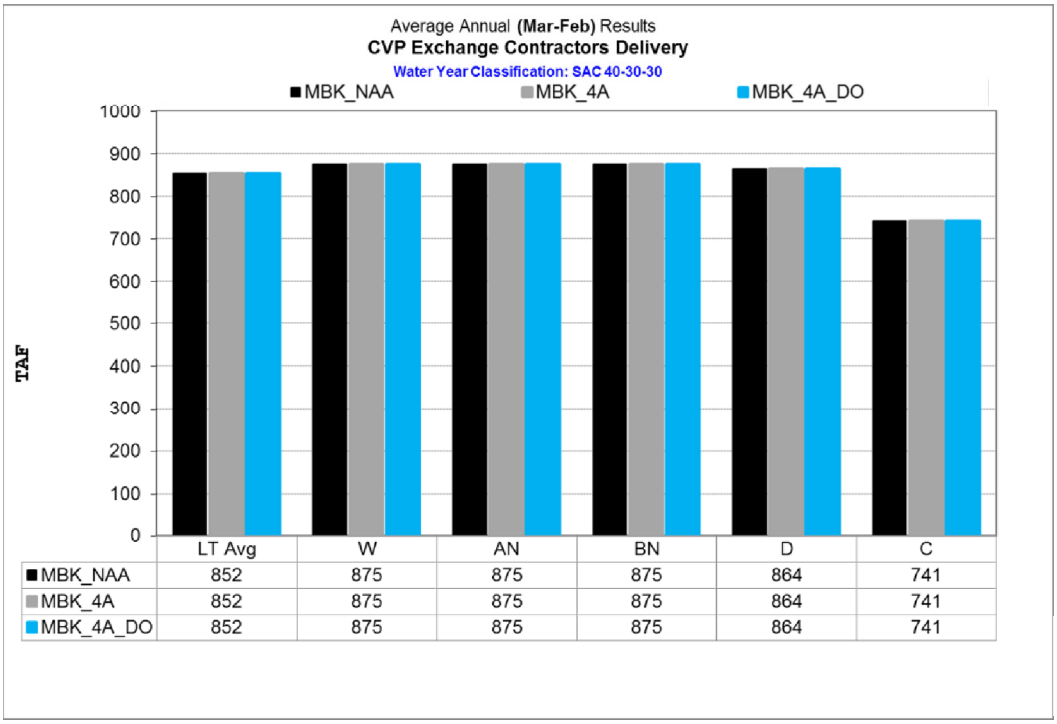
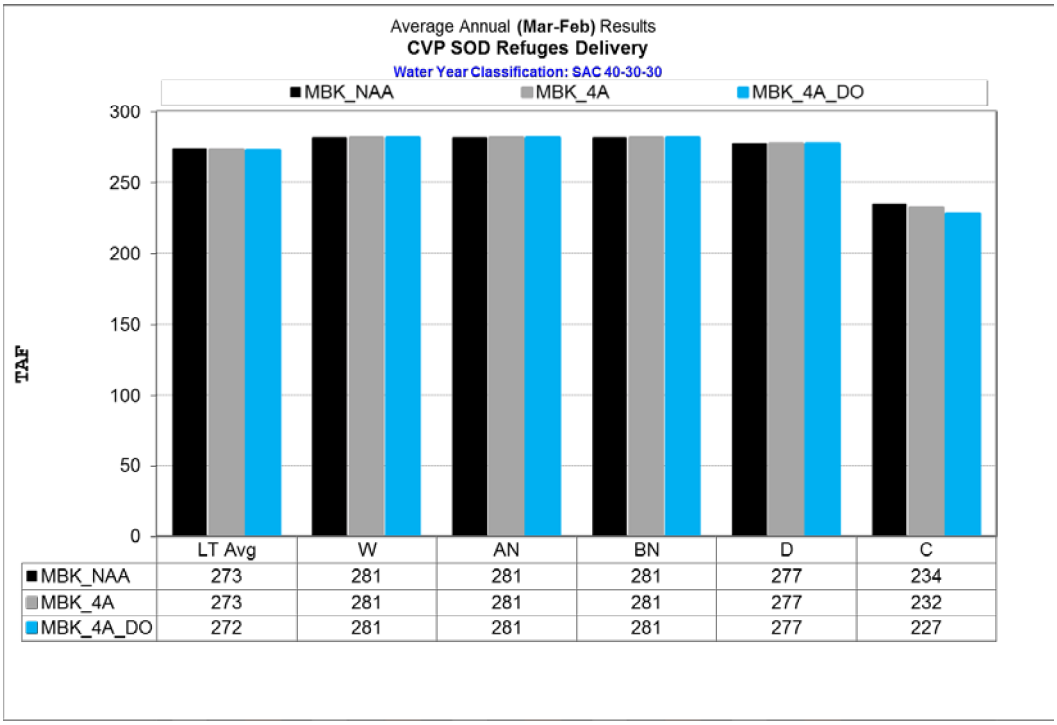
Figure 4: Annual CVP San Joaquin River Exchange Contractors' Deliveries using MBK Modeling




| | LT Avg | W | AN | BN | D | C |
|---|---|---|---|---|---|---|
| MBK_NAA | 852 | 875 | 875 | 875 | 864 | 741 |
| MBK_4A | 852 | 875 | 875 | 875 | 864 | 741 |
| MBK_4A_DO | 852 | 875 | 875 | 875 | 864 | 741 |

Figure 5: Annual CVP South-of-Delta Refuge Level 2 Deliveries using MBK Modeling




| | LT Avg | W | AN | BN | D | C |
|---|---|---|---|---|---|---|
| MBK_NAA | 273 | 281 | 281 | 281 | 277 | 234 |
| MBK_4A | 273 | 281 | 281 | 281 | 277 | 232 |
| MBK_4A_DO | 272 | 281 | 281 | 281 | 277 | 227 |

Mr. Bourez also argues that CalSim II does not address effects on many types of water users. He states that CalSim II "does not model any changes in water deliveries to

Sacramento River Settlement Contractors, Feather River Settlement Contractors, wildlife refuges, CVP Exchange Contractors or non-Project water right holders. Because all CVP and SWP Settlement Contractor deliveries and all non-Project water user deliveries are "Hard Coded", the model is forced to meet these deliveries unless it runs out of water." [Exhibit SVWU-107 p. 2, ¶ 4.]

Mr. Bourez's argument that water user deliveries are hard-coded in CalSim II is fundamentally wrong. Deliveries to water users are not hard-coded in CalSim II. Instead, CalSim II delivers water based on the available water supply and specified priority. For example, simulated delivery to Sacramento River Settlement Contractors, Feather River Settlement Contractors, wildlife refuges, and CVP Exchange Contractors are based on hydrologic conditions for the water year, tributary and delta minimum flow requirements, and availability of upstream storage. These deliveries are simulated at the highest priority as long as sufficient storage and regulatory flow conditions can be met. If simulated storage levels were insufficient to meet these deliveries, then reductions in deliveries could occur. If the model shows that water deliveries to these users, and the frequency of stressed water supply conditions for the project scenario matches the no action alternative, as is the case in this analysis, it indicates that the project scenario does not have any impact to the water users.

In short, even if we assume that MBK's more aggressive modeling is correct, which we do not, there is no evidence of injury to legal water users as detailed above.

## III. SVWU MODELING OF DISCRETIONARY DECISIONS ARE FLAWED

I reviewed the MBK modeling. MBK modeling includes several changes as documented in [Exhibit SVWU-107, p.41] Of all the changes noted, MBK's changes to three inter-related inputs account for a majority of the differences between the petitioners' results and the MBK's results. All three MBK's changes were meant to prioritize higher south-of-Delta deliveries over protection of upstream carryover storage. These changes include:

1) use of unreasonable foresight in the allocation logic,